

ABSTRACT OF THE DISCLOSURE

[0040] A short circuit detector for a fieldbus network which includes power/data wires that are typically positive and negative, respectively, and a shield conductor connected to a ground includes first and second high-impedance semiconductor circuits coupled between each of the leads and the shield conductors. Both circuits may either have a dedicated alarm indicator which indicates the presence of a short circuit between that conductor and the shield and/or may be coupled together to an alarm circuit which activates an alarm whenever a short circuit exists between either of the power/data leads and the shield conductor. The alarm circuit may have a ground which is isolated from the shield ground and may thus employ an isolation device such as an opto-isolator.